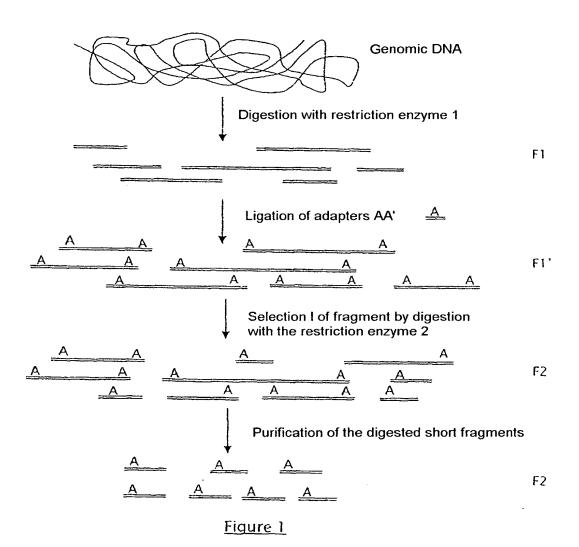
Title: METHOD OF PREPARING DNA FRAGMENTS BY SELECTIVE 0 / 55 3 6 0 3 FRAGMENTATION OF NUCLEIC ACIDS AND APPLICATIONS THEREOF

Inventor(s): Anne-Gaëlle BRACHET et al.
Atty. Docket No. 1169-041



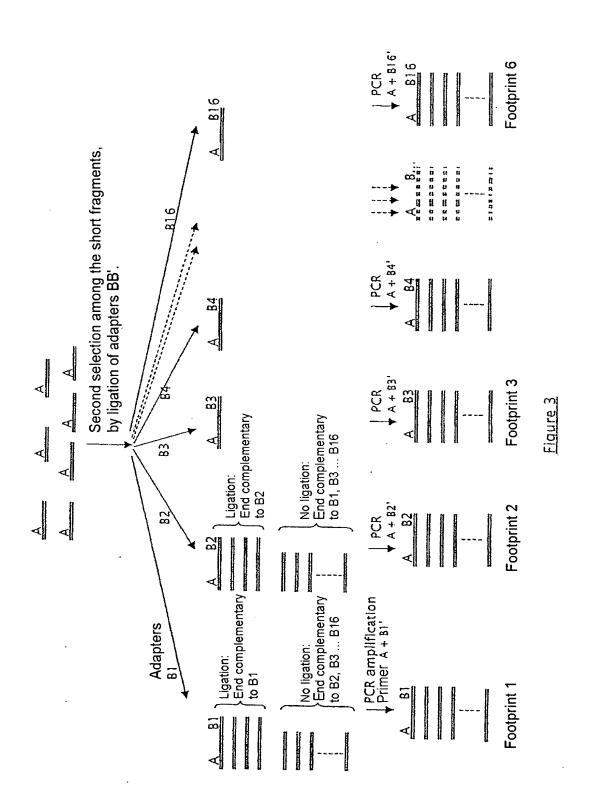
# Title: METHOD OF PREPARING DNA FRAGMENTS BY SELECTIVE 1553655 FRAGMENTATION OF NUCLEIC ACIDS AND APPLICATIONS THEREOF Inventor(s): Anne-Gaëlle BRACHET et al. Atty. Docket No. 1169-041

| Number of bases<br>selected Number of potential | in the 5' position in the 3' position (footprints) | 1/32 1/16 16<br>(2x4x4) (4x4) | 1/128 1/16 16<br>(4x2x4x4) (4x4) | 1/256 1/256 256<br>(4x4x4x4) (4x4x4x4) | 1/64 1/256 256<br>14 (4x4x4) (4x4x4x4) | 1/16 1/256 256<br>(4×4) (4×4×4×4) | 1/256 1/16 16<br>(4×4×4×4) (4×4) | 1/64 1/16 16<br>(4×4×4) (4×4) | 1/4 1/16 16 (4) (4×4)             |
|---|--|-------------------------------|----------------------------------|--|--|-----------------------------------|----------------------------------|-------------------------------|-----------------------------------|
| ;   | Enzyme E2  | TCCPuAC18                     |                                  | GGGAClo                                |  | GGCGCA                            |                                  |                               |                                   |
| E<br>E<br>E                                     | enzyme e i   | Bam H1 CCTAGE                 | ECORI CAATTC                     | Pst 1 CTGCAG<br>GACGTC                 | Msp.1 dcgg                             | Xma Cl dccocc                     | Msp.1 dcgc                       | <u>ξου 561</u><br>CGCGG       | <u>المعة ا</u> محمولون<br>محمولون |

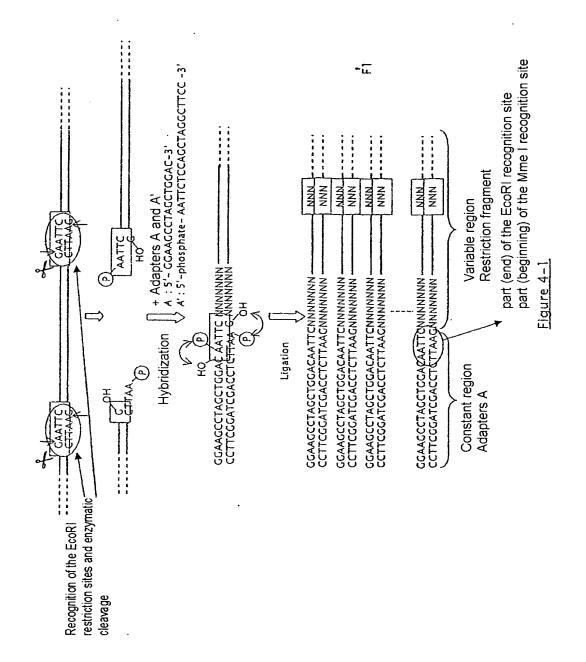
Title: METHOD OF PREPARING DNA FRAGMENTS BY SELECTIVE FRAGMENTATION OF NUCLEIC ACIDS AND APPLICATIONS THEREOF Inventor(s): Anne-Gaëlle BRACHET et al.

Atty Docket No. 1100 201

Atty. Docket No. 1169-041

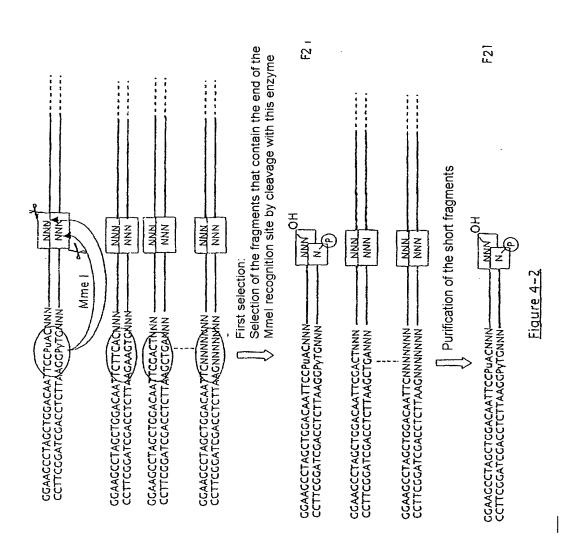


Atty. Docket No. 1169-041 4/14



Title: METHOD OF PREPARING DNA FRAGMENTS BY SELECTIVE 10/553633 FRAGMENTATION OF NUCLEIC ACIDS AND APPLICATIONS THEREOF Inventor(s): Anne-Gaëlle BRACHET et al.

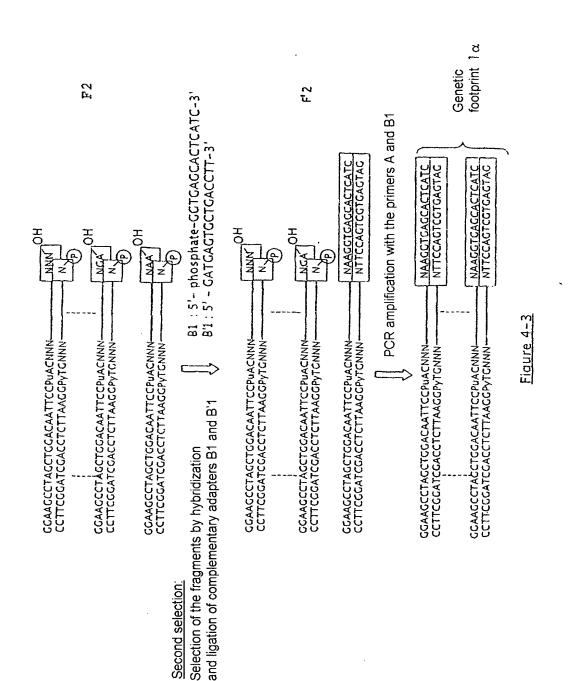
Atty. Docket No. 1169-041 5/14



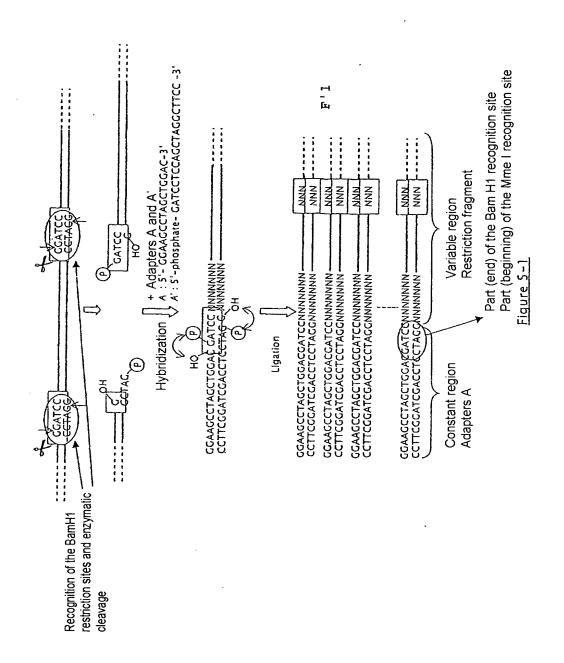
Title: METHOD OF PREPARING DNA FRAGMENTS BY SELECTIVE OF FRAGMENTATION OF NUCLEIC ACIDS AND APPLICATIONS THEREOF Inventor(s): Anne-Gaëlle BRACHET et al.

135340

Atty. Docket No. 1169-041 6/14

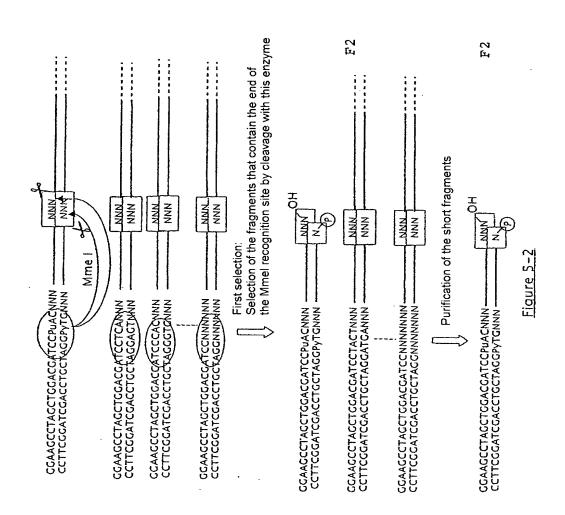


### Title: METHOD OF PREPARING DNA FRAGMENTS BY SELECTIVO / 553603 FRAGMENTATION OF NUCLEIC ACIDS AND APPLICATIONS THEREOF Inventor(s): Anne-Gaëlle BRACHET et al. Attv. Docket No. 1160.041



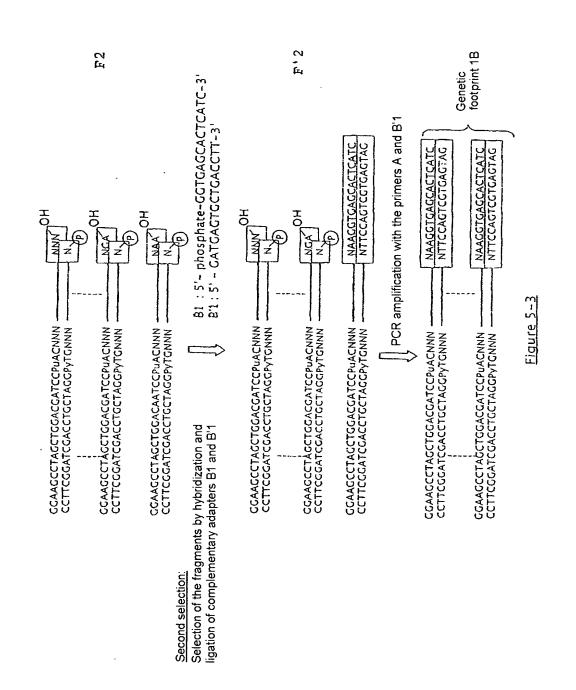
### Title: METHOD OF PREPARING DNA FRAGMENTS BY SELECTIVE 0 / 553635 FRAGMENTATION OF NUCLEIC ACIDS AND APPLICATIONS THEREOF Inventor(s): Anne-Gaëlle BRACHET et al.

Atty. Docket No. 1169-041 8/14



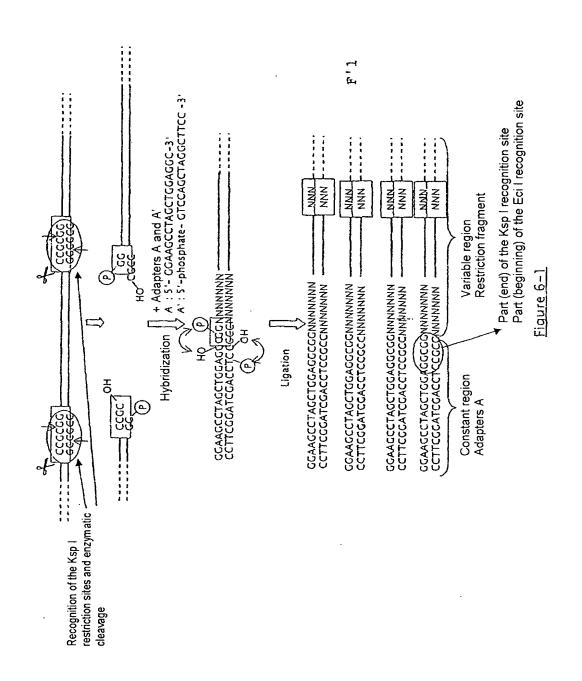
Title: METHOD OF PREPARING DNA FRAGMENTS BY SELECTIVE 0/553603
FRAGMENTATION OF NUCLEIC ACIDS AND APPLICATIONS THEREOF
Inventor(s): Anne-Gaëlle BRACHET at al

Atty. Docket No. 1169-041



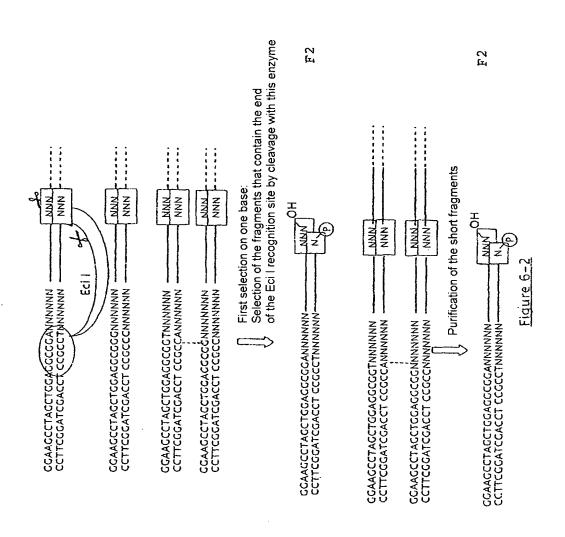
### Title: METHOD OF PREPARING DNA FRAGMENTS BY SELECTIVE 15536 3 FRAGMENTATION OF NUCLEIC ACIDS AND APPLICATIONS THEREOF Inventor(s): Anne-Gaëlle BRACHET et al.

oventor(s): Anne-Gaëlle BRACHE Atty. Docket No. 1169-041 10/14



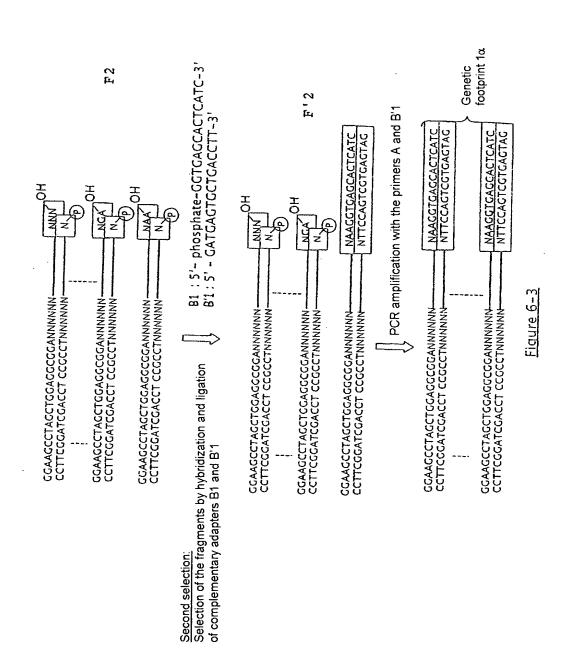
#### Title: METHOD OF PREPARING DNA FRAGMENTS BY SELECTIVE 0/553603 FRAGMENTATION OF NUCLEIC ACIDS AND APPLICATIONS THEREOF Inventor(s): Apple Geille BRAGMENTS:

Inventor(s): Anne-Gaëlle BRACHET et al. Atty. Docket No. 1169-041 11/14



### Title: METHOD OF PREPARING DNA FRAGMENTS BY SELECTIVE 0/553603 FRAGMENTATION OF NUCLEIC ACIDS AND APPLICATIONS THEREOF Inventor(s): Anne-Gaëlle BRACHET at al

Inventor(s): Anne-Gaëlle BRACHET et al.
Atty. Docket No. 1169-041
12/14



## Title: METHOD OF PREPARING DNA FRAGMENTS BY SELECTIME 0/553603 FRAGMENTATION OF NUCLEIC ACIDS AND APPLICATIONS THEREOF Inventor(s): Anne-Gaëlle BRACHET et al. Atty. Docket No. 1169-041

|        | Enzyme                 | El <sub>A</sub>  | Enzyme E2 |   |  |   |  |  |
|--------|------------------------|--|-----------|---|--|---|--|--|
| Name   | Restriction site       | Selection 1 of<br>the fragments<br>by cleavage 1<br>(step a) | Name      | Restriction site                                | Selection 2 of<br>the fragments<br>by cleavage 2<br>(step c) | Optional selection 3 of the fragments (steps e and f) |  |  |
| Tagª I | -TCGA<br>-AGCT         | governed by E1 <sub>C</sub>                                  | BseR I    | -GAGGAGN <sub>10</sub><br>-CTCCTCN <sub>8</sub> | 1 1<br>1<br>44 256   | $\frac{1}{-}$ , $\frac{1}{-}$                         |  |  |
| Msp I  | -CC <b>GG</b><br>-GGCC | governed by £1 <sub>C</sub>                                  | BsmF I    | -GGGACN <sub>10</sub><br>-CCCTGN <sub>14</sub>  | 43 64  | 1 1<br>   |  |  |
| Msp I  | -CCGG<br>-GGCC         | governed by<br>E1 <sub>C</sub>                               | Eci I     | - <u>GG</u> CGGAN <sub>II</sub><br>-CCGCCTN,    | 1 1<br>4 <sup>4</sup> 256                                    | $\frac{1}{4^2} = \frac{1}{16}$                        |  |  |
| Msp I  | -CCGG                  | governed by<br>E1 <sub>C</sub>                               | Fok I     | -GGATGN <sub>9</sub><br>-CCTACN <sub>13</sub>   | 1 1<br>4 <sup>3</sup> 64                                     | 1 1<br>4 256  |  |  |

Figure 7

Inventor(s): Anne-Gaëlle BRACHET et al. Atty. Docket No. 1169-041 14/14

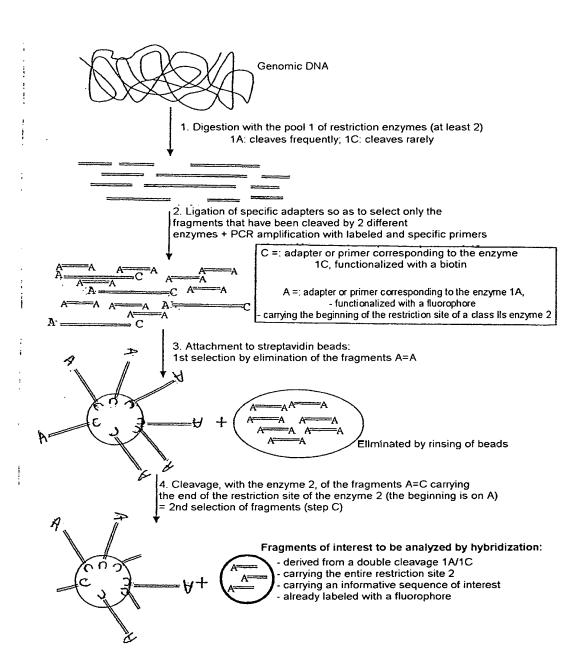


FIGURE 8